

09 May, 2001

MODIS sensor Working Group (MsWG) Summary

Attendance: Bill Barnes, Eddie Kearns, Gary Toller, Jack Xiong, Jim Young, Mike Roberto, Roger Drake, Stuart Biggar, Wayne Esaias, Gwyn Fireman, Vincent Chiang, Junqiang Sun

News:

- MCST sent the linear-fit m1 LUT to the DAAC, who will perform some testing before delivery to SDST.
- The SRCA test data is being processed.
- The LWIR PV sweep is under analysis. Test data is not behaving as expected. MCST has confirmed that the VDET settings were as planned. The PC bands performed as expected, so there was no instrument failure. MCST has asked the operations team whether there was any difference in procedure from the last valid test.
- A small group telecon will take place this Thursday at 4:00 PM EDT to discuss FM-1 testing plans with SBRS.
- A small group (to include SBRS) will meet with Gene Waluschka to discuss Solar Diffuser modeling this Friday at 1:30 PM EDT.

Band 26 Striping:

- Detector 1 (SBRS order) shows highest degree of striping (~20 DN), highly dependent on radiance. Detectors 2 and 10 show a lesser effect.
- No striping is observed at night, indicating that thermal crosstalk is not the cause. Thermal crosstalk is the source of a 4-5 DN variation in all detectors.
- SBRS notes that crosstalk cannot be ruled out. FM-1 thermal vacuum tests show that in most bands, end detectors typically have a greater sensitivity to crosstalk.
- Preflight striping patterns observed in T/V tests do not resemble on-orbit striping in detector number, amplitude, or trend wrt radiance.
- The SAM resistor was changed after the thermal vacuum tests; changes in performance are not unexpected.
- No obvious striping is seen at the Solar Diffuser radiance level; on-orbit calibration is as good as can be expected.
- Band 26 is on the same FPA and made of the same HgCdTe as PV bands calibrated with a quadratic, so it's reasonable to assume that Band 26 might best be characterized by a quadratic as well.
- The SIS-100 calibration source is not adequate to determine non-linearity.
- SRCA spatial-mode tests show other detectors as having a "leaky pixel" response.

Around the Table

Mike Roberto is attending the VIIRS instrument interface meeting at Raytheon/SBRS in Santa Barbara, CA.

Vermote and **Platnick** are attending a meeting at University of Wisconsin.

Esaias:

Q: RVS changes show a difference in mirror sides in the visible. Is it a fair assumption that thermal bands will show a similar MS difference in RVS?

A (from Jim Young): We don't have enough consistent data to do the trending, due to mirror-side correlated noise.

Barnes:

We are trying to get permission to do the deep-space pitch/roll maneuver.

Q: Is the TEB RVS changing?

A: We have no uniform source on-orbit, so we can only determine RVS mirror side ratio.

Kearns:

Miami received the new m1 LUTs, and is finishing the RSB calibration.

No new Action Items resulted from this meeting.

compiled by G. Fireman 10 May, 2001